

## Calosomina and Carabina (Coleoptera, Carabidae) from the Baotianman Nature Reserve in Western Henan, Central China

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**Abstract** Seven species of the subtribes Calosomina and Carabina (tribe Carabini) are recorded from the Baotianman Nature Reserve in western Henan of Central China. Of these, two are described as new subspecies under the names *Archaeocarabus vigili finiuensis* and *Lasiocoptolabrus sunwukong baotianmanus*.

Our knowledge is still insufficient about the carabid fauna of Henan Province in Central China. So far as I know, total number of the species belonging to the subtribe Carabina hitherto recorded from this province is less than ten, which is much smaller than those in the adjacent provinces such as Shaanxi and Hubei. Recently, I had an opportunity to examine a series of carabine specimens collected from the Baotianman Nature Reserve in the western part of Henan Province. In this paper, I am going to record two species of the subtribe Calosomina and five species of the subtribe Carabina included in the same series. Of these, two taxa belonging to the latter subtribe will be described as new subspecies. For the higher classification of the Carabina, I will follow the system proposed by IMURA (2002).

Before going further, I wish to express my sincere thanks to Mr. Jaroslav TURNA (Czech Republic) for his kind help in various ways. Hearty thanks are also due to Dr. Shun-Ichi UENO (National Science Museum, Tokyo) for reading the manuscript of this paper.

### 1. *Calosoma inquisitor cyanescens* MOTSCHULSKY, 1859

*Calosoma cyanescens* MOTSCHULSKY, 1859, Bull. Soc. imp. Naturalistes Moscou, **2**, p. 489; type area: Amour.

*Specimens examined.* 4♂♂, 1♀, Baotianman [宝天曼] Nature Reserve, 33.5°N / 111.9°E, on the Funiu Shan [伏牛山] Mountains, in Neixiang Xian [内乡县], of western Henan, Central China, 15–17–V–2005, preserved in the collections of Y. IMURA & J. TURNA.

### 2. *Calosoma maximowiczii maximowiczii* MORAWITZ, 1863

*Carabus (Calosoma) Maximowiczii* MORAWITZ, 1863, Mém. Acad. imp. Sci. St. Pétersbourg, (7), **6** (3), p.

20; type locality: Hakodate.

*Specimens examined.* 11♂♂, 4♀♀, Baotianman Nature Reserve, 33.5°N/111.9°E, on the Funiu Shan Mountains, in Neixiang Xian, of western Henan, Central China, 15~17-V-2005, preserved in the collections of Y. IMURA & J. TURNA.

### 3. *Sinoleptocarabus marcilhaci romanellus* IMURA, 1999

*Carabus (Leptocarabus) marcilhaci romani* IMURA, 1998, Jpn. J. syst. Ent., Matsuyama, **4**, p. 44, figs. 6, 17; type locality: near the borders of Shaanxi and Henan (33°48'–53'N/110°40'–46'E), China. Nec *Carabus (Chrysocarabus) punctatoauratus romani* RAYNAUD, 1968, Bull. Soc. linn. Lyon, **37**, p. 303. *Carabus (Leptocarabus) marcilhaci romanellus* IMURA, 1999, Jpn. J. syst. Ent., Matsuyama, **5**, p. 143.

*Specimens examined.* 9♂♂, 26♀♀ (28.5–32.0 mm in length including mandibles), Baotianman Nature Reserve, 33.5°N/111.9°E, on the Funiu Shan Mountains, in Neixiang Xian, of western Henan, Central China, 15-V~2-VI-2005, preserved in the collections of Y. IMURA & J. TURNA.

*Notes.* The Baotianman specimens well agree in every feature with subsp. *romanellus* described from near the borders of Shaanxi and Henan.

### 4. *Scambocarabus shaanxiensis* DEUVE, 1991

(Fig. 1)

*Carabus (Tomocarabus) shaanxiensis* DEUVE, 1991, Nouv. Revue Ent., Paris, (N. S.), **8**, p. 105; type locality: Chine, Shaanxi, Ankang Xian.

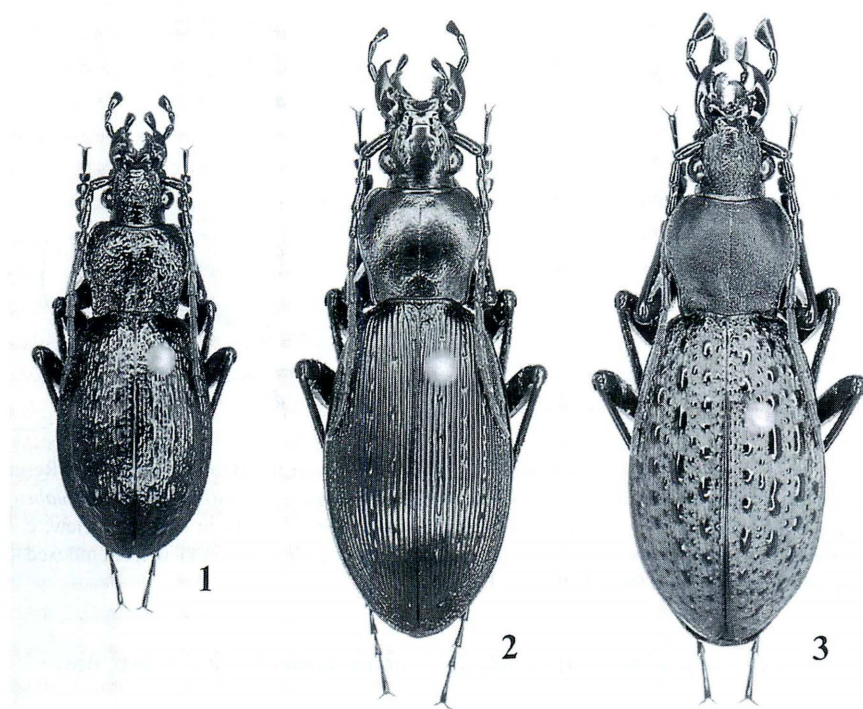
*Specimens examined.* 132♂♂, 49♀♀ (18.0–20.3 mm in length including mandibles), Baotianman Nature Reserve, 33.5°N/111.9°E, on the Funiu Shan Mountains, in Neixiang Xian, of western Henan, Central China, 15-V~2-VI-2005, preserved in the collections of Y. IMURA & J. TURNA.

*Notes.* The Baotianman specimens almost agree with the nominotypical *shaanxiensis*, so far as I have examined a single female holotype of the latter now preserved in the Academia Sinica, Beijing. However, I prefer to leave subspecific identification for the Baotianman population until we can examine the still unknown male of the nominotypical subspecies, since this is a polytypical species showing considerable variation according to localities, above all in configuration of the aedeagus. From subsp. *shaheshang* of the Qinling Mountains (IMURA, 1993 b, p. 368), the Baotianman race could be distinguished by a little robuster apical lobe of the aedeagus.

### 5. *Archaeocarabus vigil funiuensis* IMURA, subsp. nov

(Figs. 2, 4)

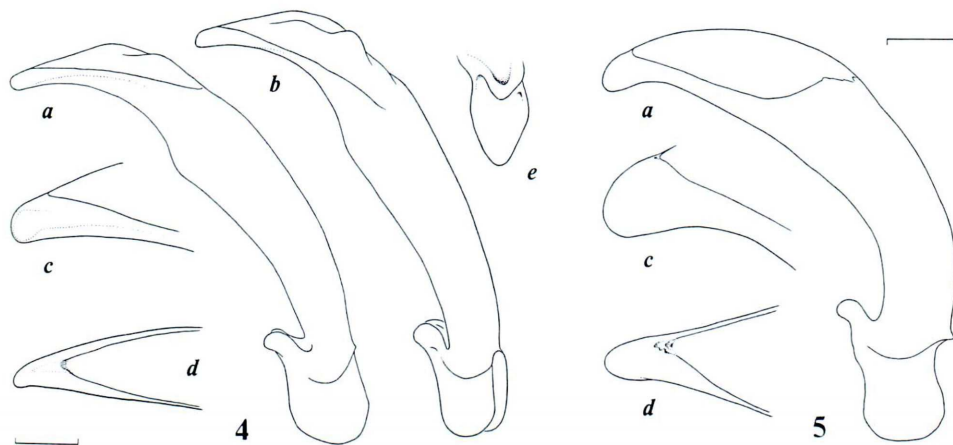
*Description.* Length (including mandibles): ♂, 23.3–24.3 mm, ♀, 25.2–28.0 mm. Entirely black with a purple-bluish or blue-greenish tinge; in some individu-



Figs. 1–3. Subtribe Carabina of the Baotianman Nature Reserve of western Hubei in Central China. — 1, *Scambocarabus shaanxiensis*; 2, *Archaeocarabus vigil funiuensis*; 3, *Lasiocoptolabrus sunwukong baotianmanus*.

als, head and pronotum black with a weak green-bluish tinge and elytra dark coppery brown with a greenish or purplish tinge; appendages black. Closely allied to subsp. *xunyangbaensis* DEUVE (2000, p. 91) described from the southeastern part of the Qinling Mountains (“6 km à l’est de Xunyangba, 1,000–1,300 mètres”), but differs from that subspecies in shorter and robuster aedeagal apex. From subsp. *cordulatus* CAVAZZUTI (1999, p. 121) also described from the southeastern Qinlings (“80 km a nord di Yang Xian”), the new subspecies is readily discriminated by a little larger size, more remarkably angulate ventral margin of aedeagus and much robuster aedeagal apex.

*Type series.* Holotype: ♂, Baotianman Nature Reserve, 33.5°N/111.9°E, on the Funiu Shan Mountains, in Neixiang Xian, of western Henan, Central China, 15–V~2–VI–2005, to be preserved in the collection of the Department of Zoology, National Science Museum (Nat. Hist.), Tokyo. Paratypes: 5♂♂, 12♀♀, same data as for the holotype, preserved in the collections of Y. IMURA & J. TURNA.



Figs. 4–5. Male genital organ of newly described subspecies from the Baotianman Nature Reserve of western Hubei in Central China. — 4, *Archaeocarabus vigil funiuensis*; 5, *Lasiocoptolabrus sunwukong baotianmanus*. — a, Aedeagus in right lateral view; b, ditto in subdorsal view; c, apical part of aedeagus in right lateral view; d, ditto in dorsal view; e, digitulus in view from inflexed side of endophallus. Scale: 1 mm for a, b; 0.5 mm for c–e.

6. *Lasiocoptolabrus sunwukong baotianmanus* IMURA, subsp. nov.

(Figs. 3, 5)

*Description.* Length (including mandibles): ♂, 24.3–25.5 mm, ♀, 27.3–27.7 mm. Readily discriminated from the nominotypical subspecies of the Qinling Mountains (IMURA, 1993 a, p. 17) in the following respects: 1) size a little larger on an average; 2) coloration of head and pronotum dark bluish, while they are deep-black in the nominotypical subspecies; 3) elytra except for elevated parts less strongly yellow-reddish; 4) antennae shorter, not reaching the middle of elytra in male; 5) dorsal surface of head and pronotum not roughly wrinkled as in the nominotypical subspecies but minutely scabrous, coarsely scattering with small punctures; 6) elytra a little more strongly convex above, with the elevated parts of intervals more strongly polished; 7) tertiary intervals reduced to rows of small granules which are not fused with adjacent intervals; 8) aedeagus (Fig. 5) as in the nominotypical subspecies, though the median portion is a little more elongated and apical lobe is a little more prominently bent ventrad in lateral view.

*Type series.* Holotype: ♂, Baotianman Nature Reserve, 33.5°N/111.9°E, on the Funiu Shan Mountains, in Neixiang Xian, of western Henan, Central China, 15–V~2–VI–2005, to be preserved in the collection of the Department of Zoology, National Science Museum (Nat. Hist.), Tokyo. Paratypes: 19♂♂, 2♀♀, same data as for the holotype, preserved in the collections of Y. IMURA & J. TURNA.

*Notes.* This is the first record of the species except for its type area, the Qinling

Mountains in southern Shaanxi. The Funiu Shan race is considerably different in external appearance from the nominotypical subspecies, and they look like two different species at a glance. However, similarity of the male genital organ proves that the two should be regarded as belonging to the same species.

### 7. *Pagocarabus crassesculptus crassethoracis* KLEINFELD, 1999

*Carabus (Pagocarabus) crassethoracis* KLEINFELD, 1999, Ent. Z., Essen, **109**, p. 14, Abb. 13, 16; type locality: China, Henan, Laojun Mt. (33.43/111.37), Luangchuan [sic] (misspelling of Luanchuan).

*Carabus (Pagocarabus) crassesculptus crassethoracis*: DEUVE, 2004, Ill. Cat. *Carabus* World, Pensoft, Sofia–Moscow, p. 279.

*Specimens examined.* 1♂, 3♀♀, Baotianman Nature Reserve, 33.5°N/111.9°E, on the Funiu Shan Mountains, in Neixiang Xian, of western Henan, Central China, 15-V~2-VI-2005, preserved in the collections of Y. IMURA & J. TURNA.

### 要 約

井村有希：中国河南省西部宝天曼自然保護区のカタビロオサムシ類とオサムシ類。—— 中国河南省西部の宝天曼自然保護区からカタビロオサムシ2種とオサムシ5種を記録し、後者のうちのふたつを新亜種として記載した。

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*Elytra, Tokyo*, **33** (2): 670, November 19, 2005

## A New Subspecies of *Pseudocoptolabrus watanabei* (Coleoptera, Carabidae)

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*Pseudocoptolabrus watanabei* (IMURA, 2003, Gekkan-Mushi, Tokyo, (384), p. 22) has been known so far only from a single male holotype from Mt. Imau Bum of eastern Kachin in northern Myanmar. Recently, I was able to examine some additional specimens of this species collected from the Chudu Razi Massif lying on the northeastern Kachin near the Yunnan borders. The specimens from this locality are morphologically distinguishable from the nominotypical race, and I am going to describe the Chudu Razi one as a new subspecies. I thank Mr. Masahiro TANAKA (Kobe) who kindly submitted the specimens to me for study.

### *Pseudocoptolabrus watanabei tenuipectoralis* IMURA, subsp. nov.

Length (including mandibles): ♂, 28.4–30.4 mm, ♀, 32.5 mm. Discriminated from the nominotypical subspecies as follows: 1) size smaller; 2) head slenderer, with narrower mandibles and smaller eyes; 3) pronotum also slenderer, with the discal surface smoother and hind angles more prominently protruded posteriad; 4) apical part of aedeagus shorter and more strongly bent ventrad in lateral view.

*Type series.* Holotype: ♂, Chudu Razi Massif, 2,800 m in alt., NE. Kachin, N. Myanmar, VI–2004, preserved in the National Science Museum (Nat. Hist), Tokyo. Paratypes: 1 ♀, same data as for the holotype; 4 ♂♂, same locality, VIII–2005, in colls. Y. IMURA & M. TANAKA.